



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT

APPLICANTS: Dieter RITTER CONFIRMATION NO.: 6358  
SERIAL NO.: 10/824,225 GROUP ART UNIT: 2882  
FILED: April 14, 2004  
TITLE: "X-RAY APPARATUS AND METHOD TO PRODUCE A  
SURFACE IMAGE"

**MAIL STOP DD**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

S I R:

In accordance with the provisions of 37 C.F.R. § 1.56, Applicant requests that citation and examination of the following documents be made during the course of examination of the above-referenced application for United States Letters Patent.

- AA United States Patent No. 6,491,430
- AB United States Patent No. 6,229,873
- AC United States Patent No. 5,923,727
- AL German PS 100 15 824
- AM German OS 40 21 102
- AU "A Simple and Flexible Calibration Method For Range Sensors,"  
Blossey et al, Int. Conf. Of The ICO (April 1994), page 62
- AV "Laser Triangulation: Fundamental Uncertainty in Distance  
Measurement," Dorsch et al, Applied Optics, Vol. 33, No. 7  
(March 1994), pages 1306-1314
- AW "Three-Dimensional Sensing of Rough Surfaces by Coherence  
Radar," Dresel et al, Applied Optics, Vol. 31, No. 7 (March  
1992), pages 919-925.

- AX "Acquisition of 3-D Data by Focus Sensing," Engelhardt et al, Applied Optics, Vol. 27, No. 22 (November 1988), pages 4684-4689
- AY "Simple, Robust and Accurate Phase-Measuring Triangulation," Gruber et al, Optik, Vol. 89, No. 3 (1992) pages 113-122.
- AZ "Light Sectioning With Large Depth and High Resolution," Häusler et al, Applied Optics, Vol. 27, No. 4 (December 1988), pages 5165-5169.
- AV' "Parallel Three-Dimensional Sensing by Color-Coded Triangulation," Häusler et al., Applied Optics, Vol. 32, No. 35 (December 1993), pages 7164-7169.
- AW' "Optische 3D-Sensoren und Deren Industrielle Anwendung," Blossey et al., Messtec, 1/96 (March 1996), pages 24-26.
- AX' "Acquisition of Three-Dimensional Image Data by a Scanning Laser Range Finder," Moring et al, Opt. Eng., Vol. 28, No. 8 (1989) pages 897-902.

#### **EXPLANATION OF RELEVANCE**

The German counterpart to Reference AA, together with References AB, AC, AL and AM were cited by the German Patent and Trademark Office in connection with the counterpart German application.

Reference AC and References AU through AW' were identified and discussed in the present specification, and Applicant stands by the statements in the specification concerning the teachings of these references.

Copies of the above References together with Form 1449 (two sheets) are submitted herewith.

Complete translations of References AL and AM are not readily available to the Applicant, however, each of those references has an English language abstract attached thereto.

An English translation of Reference AV' is not readily available to the Applicant. That reference provides an overview of the use of optical 3D sensors for various industrial uses.

As of the date of mailing of this Information Disclosure Statement, a first Office Action on the merits has not been received in connection with this application. This Information Disclosure Statement is therefore in compliance with 37 C.F.R. §1.97(b)(3), and no fee is necessary.

All claims of the application are submitted to be patentable over the teachings of the above references, taken singly or in combination. Early consideration of the application is therefore respectfully requested.

Submitted by,

 (Reg. 28,982)

SCHIFF, HARDIN LLP, **CUSTOMER NO. 26574**

Patent Department, 6600 Sears Tower  
233 South Wacker Drive  
Chicago, Illinois 60606  
Telephone: 312/258-5790  
Attorneys for Applicant.

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on August 17, 2004.



STEVEN H. NOLL



Form PTO-1449

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION  
(use several sheets if necessary)

Docket No.  
P04,0101

Serial No.  
10/824,225

Applicant  
Dieter RITTER

Filing Date  
April 14, 2004

Group Art Unit  
2882

## U.S. PATENT DOCUMENTS

Examiner's Initials		Document Number	Date	Name	Class	Subclass	Filing Date If appropriate
	AA	6,491,430	12/10/02	Seissler			
	AB	6,229,873	05/08/01	Bani-Hashemi et al.			
	AC	5,923,727	07/13/99	Navab			
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

## FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	AL	100 15 824	11/21/02	Germany				
	AM	40 21 102	01/17/91	Germany				
	AN							
	AO							
	AP							
	AQ							

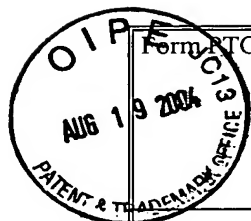
## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AT	
	AU	"A Simple and Flexible Calibration Method For Range Sensors," Blossey et al, Int. Conf. Of The ICO (April 1994), page 62
	AV	"Laser Triangulation: Fundamental Uncertainty in Distance Measurement," Dorsch et al, Applied Optics, Vol. 33, No. 7 (March 1994), pages 1306-1314
	AW	"Three-Dimensional Sensing of Rough Surfaces by Coherence Radar," Dresel et al, Applied Optics, Vol. 31, No. 7 (March 1992), pages 919-925.
	AX	"Acquisition of 3-D Data by Focus Sensing," Engelhardt et al, Applied Optics, Vol. 27, No. 22 (November 1988), pages 4684-4689
	AY	"Simple, Robust and Accurate Phase-Measuring Triangulation," Gruber et al, Optik, Vol. 89, No. 3 (1992) pages 113-122.
	AZ	"Light Sectioning With Large Depth and High Resolution," Häusler et al, Applied Optics, Vol. 27, No. 4 (December 1988), pages 5165-5169.

Examiner

Date Considered

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Form PTO-1449

**INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION**  
(use several sheets if necessary)

Docket No.  
P04,0101Serial No.  
10/824,225Applicant  
Dieter RITTERFiling Date  
April 14, 2004Group Art Unit  
2882**U.S. PATENT DOCUMENTS**

Examiner's Initials		Document Number	Date	Name	Class	Subclass	Filing Date If appropriate
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

**FOREIGN PATENT DOCUMENTS**

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	AL							
	AM							
	AN							
	AO							
	AP							
	AQ							

**OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)**

	AT	
	AU	
	AV	"Parallel Three-Dimensional Sensing by Color-Coded Triangulation," Häusler et al., Applied Optics, Vol. 32, No. 35 (December 1993), pages 7164-7169.
	AW	"Optische 3D-Sensoren und Deren Industrielle Anwendung," Blossey et al., Messtec, 1/96 (March 1996), pages 24-26.
	AX	"Acquisition of Three-Dimensional Image Data by a Scanning Laser Range Finder," Moring et al, Opt. Eng., Vol. 28, No. 8 (1989) pages 897-902.
	AY	
	AZ	

Examiner

Date Considered

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.